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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Art Unit: 2894

Continuation of 11:

Mainly, applicant argues that Nishio's luminescent layer is not insulating with which examiner disagrees. Examiner would like to direct applicant's attention to Nishio's columns 7-8, wherein the chemical composition/formula of the 3 layers of the luminescent layer is disclosed. Layers 5a and 5b comprise hydrogen and carbon, and nitrogen elements; and layer 5c comprises mainly oxygen, nitrogen and Al elements. As such, the material composition of the luminescent layer suggests that the layer has insulating properties contrary to applicant's arguments. Additionally, there are metallic/conductive plugs through the luminescent layer 505 (e.g. see Fig. 9B) that supports the interpretation that the luminescent layer 505 is more insulating/dielectric than conductive.

As for the arguments regarding planarization and a uniform surface, it is common knowledge in the semiconductor art to remove surface irregularities to obtain a smoother surface for insulating and conductive material. Nishio's Fig. 9B depicts the insulating layers and plugs having uniform and planarized surface (e.g. note layer 505 and plug 501b, note layer 507 and plug 510). Also, Chen provides further evidence to the preference for a uniform surface for insulating and conductive layers (see Fig. 1E) through a process of CMP (chemical mechanical polishing), and polishing or planarizing through CMP is widely used in the art and within the knowledge of one of ordinary skill in the art.

In view of the above, applicant's argument is not persuasive.

mtk

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/Kimberly D Nguyen/

Supervisory Patent Examiner, Art Unit 2894